

# Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 version

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

## Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2<sup>nd</sup> edition, as amended by COP9 Resolution IX.1 Annex B). A 3<sup>rd</sup> edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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### 1. Name and address of the compiler of this form:

#### Musabayev Khairbek

Deputy Chairman  
Republic of Kazakhstan  
010000, Astana city, 35/2 street, Ministry House,  
entrance №5, 6 floor, office 608  
Tel.: +7(7172)742834  
Secretary: +7(7172) 743326  
e-mail: [mussabayev@minagri.kz](mailto:mussabayev@minagri.kz)

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Designation date

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Site Reference Number

#### Yevgeniy Bragin

Senior scientific employee  
Naurzum National Natural Reserve.  
Address: Taran str., 165, 12. Kostanay city. Kazakhstan.  
Tel./Fax: 7142) 548532, e-mail: [naurzum@mail.ru](mailto:naurzum@mail.ru)

#### Vera Inyutina

National Manager of the UNEP/GEF Siberian Crane Wetlands Project  
Republic of Kazakhstan  
010004, Astana city, Imanbayeva 8/3 street,  
office 70  
Tel.: +7(7172)536652  
Secretary: +7(7172) 536656  
e-mail: [vera.inyutina@mail.ru](mailto:vera.inyutina@mail.ru)

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### 2. Date this sheet was completed/updated:

22 April 2009

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### 3. Country:

Republic of Kazakhstan

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**4. Name of the Ramsar site:**

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

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**KULYKOL-TALDYKOL LAKE SYSTEM**

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**5. Designation of new Ramsar site or update of existing site:**

**This RIS is for** (tick one box only):

- a) **Designation of a new Ramsar site** ✓; or  
b) **Updated information on an existing Ramsar site**

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**6. For RIS updates only, changes to the site since its designation or earlier update:**

**a) Site boundary and area**

**The Ramsar site boundary and site area are unchanged:**

or

**If the site boundary has changed:**

i) the boundary has been delineated more accurately ; or

ii) the boundary has been extended ; or

iii) the boundary has been restricted\*\*

and/or

**If the site area has changed:**

i) the area has been measured more accurately ; or

ii) the area has been extended ; or

iii) the area has been reduced\*\*

**\*\* Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

**b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:**

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**7. Map of site:**

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

i) **a hard copy** (required for inclusion of site in the Ramsar List): ✓;

ii) **an electronic format** (e.g. a JPEG or ArcView image) ✓;

**electronic format** in PDF

iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** ✓.

**Vector format shape files**

**Projection: Gauss- Kruger**

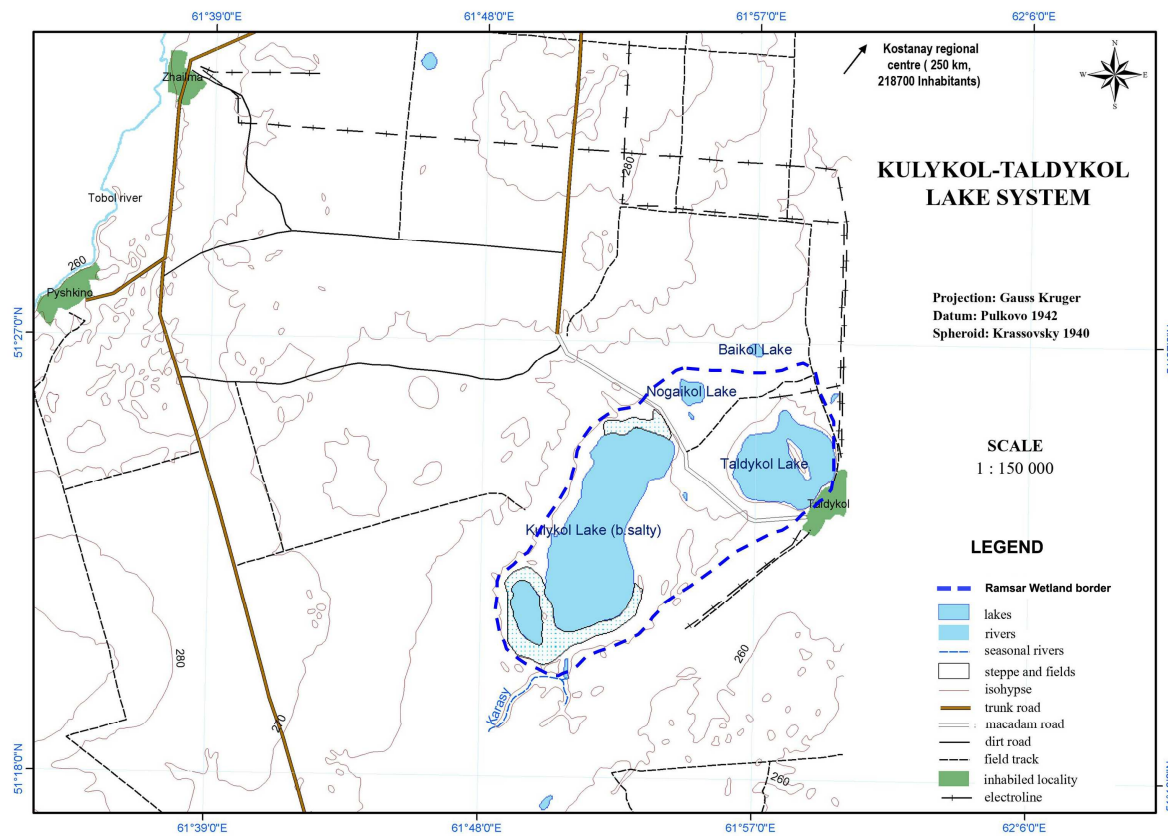
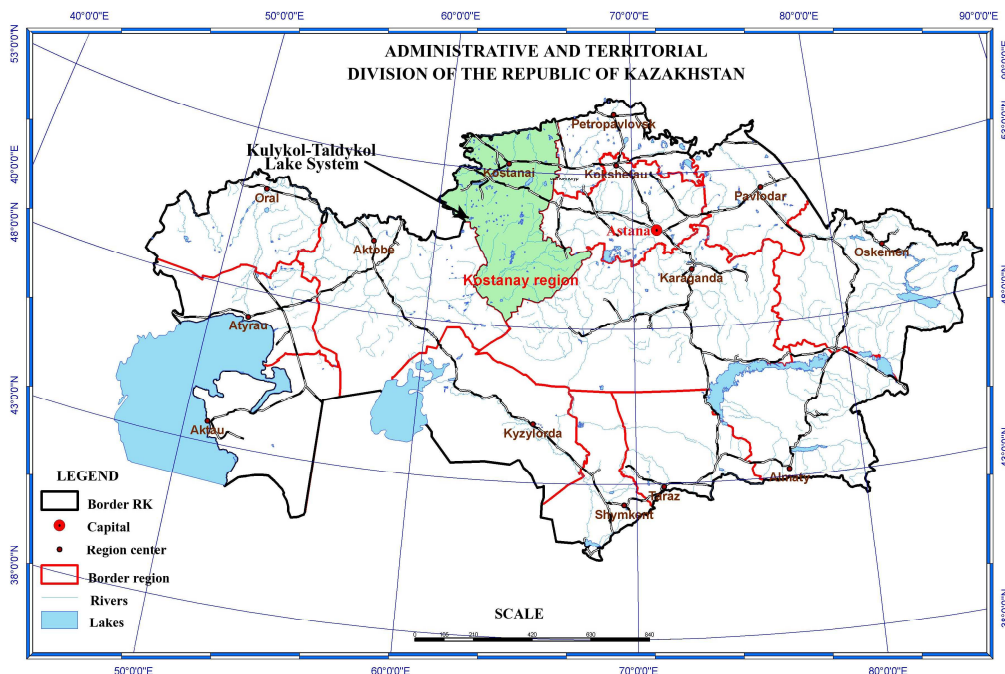
**Datum: Pulkovo 1942**

**Spheroid Krassovsky 1940**

**b) Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

Around the lake at the distance of 2-3 km from the shoreline and at the crotches of earth roads there are special signs, which indicate that Kulykol lake together with a 3-km-offshore area is a rest zone of Kulykol hunting management of the Regional Society of Hunters and Fishermen, on which territory hunting is forbidden. Partially the border of the rest zone coincides with the border of grain fields.



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**8. Geographical coordinates** (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Wetland centre: latitude 51° 23' North, longitude 61° 52' East

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**9. General location:**

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

Kamystinskiy rayon (district) of Kostanai oblast (region), Kazakhstan; 230 km south-west from the administrative centre of the region of Kostanai.

Near the western edge of the wetland on the shore of Taldykol lake the village of the same name with the population of 613 people is located. Other nearest villages are: 20 km to the north – Sakharovka village, 19 km to the west-north-west – Pushkino village. In 12 km to the west from the wetland there is a highway connecting Kostanai with the centre of Aktobe oblast (region), while in 4.5 km to the east there is a railroad. The wetland territory between Kulykol and Taldykol lakes is crossed by the earth road of the route Kostanai – Aktobe leading to Taldykol village.

Geographically the wetland is located on the right bank of the upstream of Tobol river on the border of Tersek-Aday plateau with hilly trans-Ural plateau.

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**10. Elevation:** (in metres: average and/or maximum & minimum)

Minimum altitude of the territory – 246.9 m above sea level, maximal – 260.4 m.

**11. Area:** (in hectares)

The wetland area within the borders, covering lake hollows together with offshore eco-systems and areas between the lakes, makes up 8,300 ha. The area of the very lakes at high level of water filling makes up about 4,530 ha, including Kulykol lake – 3,370 ha, Taldykol lake – 1,120 ha.

**The total area of the site is 8,300 ha.**

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**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The wetland includes two large lakes: Kulykol and Taldykol, and also smaller lakes, such as Nogaikol, Baikol and Dongelekkol. Kulykol lake is fresh, and at shallow water periods it becomes a saltish reservoir with cyclically changing hydrologic regime. By character of overgrowing it is referred to as a border-curtain type of reservoir. Reeds with locally developed communities of cattails, rushes and *Alisma plantago-aquatica* cover up to 50% of the water area. Taldykol lake has a mosaic type of overgrowing, and, when getting dry, is overgrown with reeds turning into a floodplain. In period of high and middle water filling, they serve as a place of mass nesting and moulting for waterfowl and wetland birds, one of the most important places for resting for *Anseriformes*, especially geese, rails and waders during migrations.

**13. Ramsar Criteria:**

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 • 2 • 3 • 4 • 5 • 6 • 7 8 • 9

**14. Justification for the application of each Criterion listed in 13 above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Criterion 2:** IUCN lists contain 12 bird species, including 1 species – Siberian Crane (*Grus leucogeranus*) in the category «Critically Endangered» and 2 species (White-headed Duck *Oxyura leucocephala* and Saker Falcon *Falco cherrug*) – in category «Endangered». National Red Book includes 17 species (Table 1).

**Table 1****Criterion 2**

N	English Name	Scientific Name	IUCN Status	CITES Status	CMS	National Status
1	Dalmatian Pelican	<i>Pelecanus crispus</i>	VU	I	I/II	II
2	Whooper Swan	<i>Cygnus cygnus</i>			II	II
3	Bewick's Swan	<i>Cygnus columbianus</i>			II	V
4	Lesser White Fronted Goose	<i>Anser erythropus</i>	VU		I/II	II
5	Red-breasted Goose	<i>Branta ruficollis</i>	VU	II	I/II	II
6	Ferruginous Duck	<i>Aythya nyroca</i>	NT		I/II	III
7	White-headed Duck	<i>Oxyura leucocephala</i>	EN	II	I	I
8	White-tailed See Eagle	<i>Haliaeetus albicilla</i>		II	I/II	II
9	Golden Eagle	<i>Aquila chrysaetos</i>		II	II	III
10	Imperial Eagle	<i>Aquila heliaca</i>	VU	I	I/II	III
11	Steppe Eagle	<i>Aquila nipalensis</i>			II	V
12	Great Spotted Eagle	<i>Aquila clanga</i>	VU	II	I/II	
13	Pallid Harrier	<i>Circus macrourus</i>	NT	II	II	
14	Saker Falcon	<i>Falco cherrugg</i>	EN	II	II	I
15	Siberian Crane	<i>Grus leucogeranus</i>	CR	I	I/II	I
16	Common Crane	<i>Grus grus</i>		II	II	III
17	Demoiselle Crane	<i>Anthropoides virgo</i>		II	II	V
18	Little Bustards	<i>Tetrax tetrax</i>	NT	II		II
19	Black-winged Pratincole	<i>Glareola nordmanni</i>	NT		II	
20	Pallas's Gull	<i>Larus ichthyaetus</i>				II

In May 2007, Almaty, Kazakhstan, Kulykol – Taldykol lake system was designated in the Western/Central Asian Site Network for Siberian Cranes and other water birds (CMS meeting).

**Criterion 4.** The wetland has a great significance for waterfowl (*Anseriformes*) at the most vulnerable period of their biological cycle, i.e. moulting. In years of high and middle watering large moulting gatherings of Geese and Ducks are formed on Kulykol lake. At the beginning of June 2000 the total number of gatherings on Kulykol lake was evaluated as 20-22 thousand birds. Among

*Anseriformes* the following species predominate: Greylag Geese (*Anser anser*) - 21.8 %, Mallard (*Anas platyrhynchos*) - 41.7 %, Garganey (*Anas querquedula*) - 14.3 % and Shoveler (*Anas clypeata*) - 12.3 %. The following species were also numerous: Wigeon (*Anas penelope*) - 8.7 %, Shelduck (*Tadorna tadorna*) - 7.7 % and Gadwall (*Anas strepera*) - 6.6 %. Some species of Waders have a high population as well: Black-tailed Godwit (*Limosa limosa*), Avocet (*Recurvirostra avocetta*), Little Stint (*Calidris minuta*) and Dunlin (*Calidris alpina*).

The wetland has a great significance at the period of migration. In 2000-2005 even in spite of the worsening of its hydrologic regime, Kulykol lake remained one of the most important landing reservoirs for migratory birds, especially Geese and some Duck species.

**Table 2** **Criterion 5.**

N	English Name	Scientific Name	Number of individuals (min-max)	Season Recorded e.g. winter, migration, breeding season
1	Greylag Goose	<i>Anser anser</i>	6,600-51,000	Autumn migration 1996-2007
			4,796	Moulting June 2000
2	White-fronted Goose	<i>Anser albifrons</i>	6,686-92,700	Autumn migration 1996-2007
3	Lesser White Fronted Goose	<i>Anser erythropus</i>	276-3,000	Autumn migration 1996-2007
4	Red-breasted Goose	<i>Branta ruficollis</i>	1,600-41,500	Autumn migration 1996-2007
5	Common Shelduck	<i>Tadorna tadorna</i>	1,694	Moulting June 2000
6	Ruddy Shelduck	<i>Tadorna ferruginea</i>	1,600-19,835	Autumn migration 1996-2007
7	Mallard	<i>Anas platyrhynchos</i>	1,301-53,378	Autumn migration 1996-2007
			9,174	Moulting June 2000
8	Pintail	<i>Anas acuta</i>	1,933-82,217	Autumn migration 1996-2007
9	Wigeon	<i>Anas penelope</i>	252-9,613	Moulting June 2000
10	Common Teal	<i>Anas crecca</i>	2,555-90,840	Autumn migration 1996-2007
11	Common Crane	<i>Grus grus</i>	190-3,500	Autumn migration 1996-2007
12	Black-winged Pratincole	<i>Glareola nordmanni</i>	480-600	Breeding 1999-2004
13	Ruff	<i>Philomachus pugnax</i>	6,523	Autumn migration 2007

In 1995-1997 the total population of wetland birds at the period of nesting made up up to 80,000 individuals (evaluation of S.N. Yerokhov). During autumn migration up to 450,000 water fowl make their stop on the wetland lakes. In 1996-1999 at the period of migration peak, i.e. at the beginning of October, from 86 up to 160 thousand Geese were once registered here. 57.0-65.9 % of them were represented by White-fronted Geese (*Anser albifrons*), 8.4-10.1 % - by Greylag Geese (*Anser anser*), 2.2-7.0 % - by Lesser White-fronted Geese (*Anser erythropus*) and 23.5-25.9 % - by Red-breasted Geese (*Branta ruficollis*) (P.Tolvanen & P.Pynnonen. 1998, P.Tolvanen, K.Litvin & P.Lampila. 1999, P.Tolvanen, T.Eskelin, T.Aarvak, G.Eichhorn, I.Oien, & E.Gurtovaya. 2000). Among Ducks such species as Mallard (*Anas platyrhynchos*), Pintail (*A. acuta*), Garganey (*A. querquedula*), Teal (*A. crecca*), and also Coot (*Fulica atra*), predominate, in some years there were a lot of Ruddy Shelducks (*Tadorna ferruginea*) – up to 10-12 thousand, Tufted Ducks (*Aythya fuligula*) and Smews (*Mergus albellus*). At the period of spring migration the main migrants are Ducks. The

most numerous are Tufted Ducks (*Aythya fuligula*) and Pochards (*Aythya ferina*) – they make 43.0 % and 21.5 % of the total population of birds. Golden-eye (*Bucephala clangula*) is rather typical – 2.1 %, as well as Gulls among other groups: Black-headed (*Larus ridibundus*) - 23.6 %, Little (*Larus minutus*) - 2.1 % and Yellow-legged gulls (*Larus cachinans*). Waders (Ruff *Phylomachus pugnax*, Little Stint *Calidris minuta*, Dunlin *C. alpina*, Red-necked Phalarope *Phalaropus lobatus*, etc.), Gulls and Terns also migrate in large groups, Common Cranes (*Grus grus*) are typical, while Great-crested (*Podiceps cristatus*) and Black-necked Grebes (*P. nigricollis*) are only typical in separate years.

**Criterion 6.** The period of the autumn migration has a critical significance for Lesser White-fronted Goose (*Anser albifrons*) –up to 44 % of the North-West Siberian population (1998) made their stops in 1998-2002, and Red-breasted Goose (*Branta ruficollis*)– over 47% of the population made their stops in 1998. Stops of a pair of Siberian Cranes (*Grus leucogeranus*) were registered in the region of the wetland, which makes up no less than 10% of their Western population. Dalmatian Pelicans (*Pelecanus crispus*) (27-39 pairs) nest here in ecologically favourable years. The number of some species of ducks, Common Crane (*Grus grus*) and waders exceed 1% threshold in optimal years also (Table 3).

**Table 3** **Criterion 6.**

N	English Name	Scientific Name	Subspecies/Population (if applicable)	Count (min-max)	1% Threshold
1	Greylag Goose	<i>Anser anser</i>	<i>rubrirostris</i>	6,600-51,000	2500
2			West Siberia		
3	White-fronted Goose	<i>Anser albifrons</i>	North & West Siberia	6,686-92,700	5 300
4	Lesser White Fronted Goose	<i>Anser erythropus</i>	North Europe-West Siberia	276-3,000	110
5	Red-breasted Goose	<i>Branta ruficollis</i>	World population	1,600-41,500	385
6	Ruddy Shelduck	<i>Tadorna ferruginea</i>	West Asia & Caspian Sea	1,600-19,835	500
7	Mallard	<i>Anas platyrhynchos</i>	West Siberia & S.-W. Asia	1,301-53,378	8000
8	Northern Pintail	<i>Anas acuta</i>	West Siberia, S.-W. Asia & N.-E. Asia	1,933-82,217	7000
9	Wigeon	<i>Anas penelope</i>	West & Central Siberia	252-9,613	2500
10	Common Teal	<i>Anas crecca</i>	West Siberia	2,555-90,840	10000
11	Common Crane	<i>Grus grus</i>	West Siberia & Kazakhstan	190-3,500	700
12	Black-winged Pratincole	<i>Glareola nordmanni</i>		480-600	370

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:**

Province of Pontian steppes of Palearctic region

**b) biogeographic regionalisation scheme** (include reference citation):

Scheme of M. Udvardy (M.D. Udvardy, 1975)

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## 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

**Geology and Geomorphology.** Kulykol-Taldykol Hollow is situated in 13 km to the east from the bed of Tobol river on the north-western slope of Sypsynagash Narrow. Plains of Tersek-Aday Plateau with altitude marks of 250-260 m smoothly descend south-east from the lake hollow to the altitude marks of 230-240m in the Narrow. Geomorphologically this territory is represented by wavy hardly divided slopes of stratum-socle plains. The stratum is made up mainly with Miocene sediments, to the east - with Middle and Upper Oligocene. Quaternary deposits are of dealluvial origin based on calcareous loess-like loamy and clayey soils, while in the lake hollow there are alluvial and eluvial-dealluvial deposits on saline clays and heavy loams (Nikolayev, 1963).

Lakes have natural and probably suffusion-like origin.

**Soil.** The territory of the wetland is located in the zone of dark-chesnut soils. Dark-chesnut calcareous solonetzic clayey and loamy soils mixed up with steppe solonetz and alkali soils are spread in the lake hollow and on the plateau slopes. Hydromorphic landscapes of the hollow are represented with fescue-feather-grass steppes with fescue-sagebrush, galatella and sagebrush communities.

**Hydrology.** Lakes are located in cutoff region of Tobol-Turgai interfluvium with a poor network of intermittent, short rivers. Melt water is a basic source of surface drainage. Fresh and salty lakes have flood type of water supply, mainly by means of snow accumulated in catchment basins, and changeable hydrologic and hydrochemical regimes. The water is almost fresh in periods of high filling, but becomes bitterly salty during long droughts when mineralization is increased and lakes get significantly dried. There have been no long-term observations on changes in water filling. At the beginning of 1990 the lake was almost dry, and was filled up to 2/3 in 1993, and then was filled up to ultimate marks, therefore its depth reached 3.5 m by autumn. The water level kept high until 1996, after that abatement started. In September 1999 the medium depth was not higher than 1 m, then water area of the lake was twice reduced by autumn 2000. In 2002 a new phase of watering began on the lakes of Kostanai region, then high flood repeated in 2004. But only one of the two lakes of Kulykol-Taldykol lake system was well filled, i.e. Taldykol lake. Kulykol received very little water and its level fell down till 0.5-1 m by autumn 2005.

**Climate.** The territory of the region is referred to as the Western-Siberian climatic area of the temperate zone with sharp continental climate, which is famous for great contrasts of summer and winter temperatures. Moisture supply is unstable, average annual sum of rainfall fluctuates within 250 up to 300 mm, more than 60 % of them falls on the frost-free season. The territory is typical for low air moisture and frequent winds that increase evaporation of water from the surface of the lakes.

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## 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

**Geology and Geomorphology.** The territory is situated at the junction of hilly Trans-Ural plateau and stratum plains of Tersek-Aday plateau divided into two parts by latitudinal Sypsynagash Narrow. Flat, gently wavy plains of the plateau with elevations of 250-260 m above sea level gradually descend to altitude marks of 230-240 m on the plains of the Narrow. The major part of the water catchment is located to the north, west and south-west from the lake hollow.

Geomorphologically this territory is represented by wavy hardly divided slopes of stratum-socle plains. The stratum is made up mainly with Miocene sediments, to the east - with Middle and Upper Oligocene. Quaternary deposits of dealluvial origin on calcareous loess-like loamy and clayey soils, and



also alluvial and eluvial-dealluvial deposits on saline clays and heavy loams are spread in the lake hollow (Nikolayev, 1963). There are outlets of intrusive layers of Middle Palaeozoic to the west and north from the lake hollow.

**Soil.** The wetland territory is located in the zone of dark chestnut soils. High levels of the plateau to the north, west and south from Kulykol-Taldykol hollow have dark chestnut calcareous clayey and heavy loamy soils where fescue-feather-grass steppes with xerophytic motley grass which are ploughed currently, used to predominate. The area, situated to the east on the flattened slopes in Sypsynagash Narrow, possess dark chestnut clayey and heavy loamy solonetzic soils in combination with steppe solonetz soils.

**Hydrology.** Kulykol-Taldykol hollow is located in cutoff region of Tobol-Turgai interfluvium with a poor network of intermittent, short rivers. Beside large lakes – i.e. Kulykol with the area of 3370 ha and Taldykol with the area of 1120 ha-, there are smaller lakes in the hollow. They are: Nogaikol – about 200 ha, Baikol and Dongelekkol. Melt water is a basic source of surface drainage that accumulates via small gullies and narrows from the catchment territory with the area of about 1200 sq.km. The only large waterway, at mouth of which the water often remains even in summer, is 38 km long and flows into Kulykol lake from south-west. After the road Sakharovka-Taldykol has been built between the lakes in the northern part of the catchment basin, all the melt water is collected in Taldykol lake and then, after the water level is increased up to a certain altitude, it falls over the road to Kulykol lake.

**Climate.** The territory of the region is referred to as the Western-Siberian climatic area of the temperate zone with sharp continental climate, which is famous for great contrasts of summer and winter temperatures: average temperatures in July are within 21-22°C, in January -17-18°C at absolute minimum of -46°C.

Duration of the frost-free period makes up from 120 up to 130 days. Steady snow cover remains from the end of November -first week of December until the end of March – beginning of April. Summer is dry and hot, strong winds and dry thunderstorms are frequent, the number of days with moisture of less than 30 % fluctuates from 60 up to 80. Moisture supply is unstable, average annual sum of rainfall fluctuates within 250 up to 300 mm, more than 60 % of them falls on the frost-free season. Droughts repeat occasionally.

### 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Lakes have substantial significance for supporting ecosystems of damp water-meadows that are the most productive grass communities in the steppe zone.

### 19. Wetland Types

#### a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

**Marine/coastal:** A • B • C • D • E • F • G • H • I • J • K • Zk(a)

**Inland:** L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts • U • Va •  
Vt • W • Xf • Xp • Y • Zg • Zk(b)

**Human-made:** 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

**b) dominance:**

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

P – occupy 55-60% of the wetland area, Ts - occupy 3-5%, N – 0.2-0.3%.

**20. General ecological features:**

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The wetland is located in a fully mastered agricultural zone. This circumstance is an important factor making for high concentration of geese and ducks migrating in autumn. Vast fields with grain crops surrounding lakes are their main feeding stations at this period.

Kulykol stretches from north to south for 10 km with maximum width of 4.9 km. In case of high filling the average depth of water is about 2 m, maximum – up to 4 m. Shores of the lake are edged with reeds (*Phragmites australis*) with locally developed communities of cattail, rush (*Bolboshoenus maritimus*) and water plantain (*Alisma plantago-aquatica*). The shores of the southern part of the lake are open with wide shallow waters. Large reed tracts and separate "islands" are also scattered over the entire water area of the lake. Open parts of water are covered with hornwort (*Ceratophyllum demersum*), pondgrass (*Potamogeton lucens*, *P. perfoliatus*, *P. pectinatus*) and meakin (*Myriophyllum spicatum*). In safe places hornwort forms associations with duckweed (*Lemna trisulca*), willow grass (*Polygonum amphibium*) and other plants. Out of charophytes the development of such large species as *Chara tomentosa* is possible.

There are a few islands on the lake. A big high island with bushes of tamarisk, located in the southern part of the lake, serves as a place of nesting for many birds, including colonies of Dalmatian pelicans (*Pelecanus crispus*), Great Cormorants (*Phalacrocorax carbo*), Great Black-headed Gulls (*Ichthyaeetus ichthyatus*) and Herring Gulls (*Larus argentatus*), while Gull-billed and Common Terns (*Sterna nilotica*, *S. hirundo*) make their colonies on the low spit.

Drying parts of the lake get overgrown with glasswort, which changes into annual saltwort-glasswort belt (*Salicornia europaea*, species *p. Suaeda*) and halophytic motley grass communities (*Limonium otolepis*, *Frankenia hirsuta*). On the shore ridge there are bushes of tamarisk, settlements of marsh-beets (*Limonium gmelinii*, *L. caspium*) and annual saltwort. Large areas of the terrace are occupied with *Kalidium foliatum* communities that alternate with halophytic cereal meadows (*Leymus ramosus*) and *Leymus ramosus*-fescue communities. Western slopes of the lake hollow descend in some places almost down to the shoreline. Here bushes of motley grasses (*Medicago romanica*, *Melilotus dentatus*) are spread along the shores and couch grass meadows (*Elytrigia repens*) can be also observed. If go higher they are replaced by complexes of sagebrush (*Artemisia pausiflora*) and *Festuca valesiaca*, *Stipa sareptana* communities.

Taldykol lake with the area of about 11.2 sq. km. is located in 2.3 km to the east from the northern edge of Kulykol and has almost an ideal round form. Major part of the water area of the lake is covered with reed bushes of floodplain and mosaic type. Halophytic grain meadows and *Artemisia nitrosa* communities are widely spread around the lake. From the northern and south-western side there are parts of water couch-grass meadows, which turn into marshes at the high water level.

**21. Noteworthy flora:**

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Desert species *Kalidium shrenkianum* that grows on the northern border of expansion is observed along the saline lake shores. On the western slopes of the hollow the fescue – feather grass steppes with xerophytic motley grass, ploughed in the greater part of the area, are still preserved. Tulip *Tulipa schrenkii*, included into the Red Book, is locally observed. Among macrophytes there is a relict species - *Lemna trisulca*.

## 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Altogether there are 142 bird species registered on the wetland territory. Among fauna of wetland birds 99 species are described, including *Grebes* - 4, *Loons* - 1, *Pelicans* and *Cormorant* - 3, *Ciconiiformes* - 6, *Flamingo* - 1, *Anseriformes* - 30, *Rail*- 6, *Waders* - 36, *Gulls* and *Terns* - 10, *Cranes* - 2.

Composition of the population and number of nesting wetland birds changes depending on the status of lakes' watering. Altogether, 45 species are registered, the most numerous being *Anseriformes*, *Sandpipers* and *Gulls*. According to evaluations of S.N. Yerohov, the total number of wetland birds at the period of nesting in 1995-1997 was up to 80 000 specimen. Among nesting species Mute Swan (*Cygnus olor*), Whooper Swan (*Cygnus cygnus*), Greylag Goose (*Anser anser*), Mallard (*Anas platyrhynchos*), Gadwall (*A. strepera*), Garganey (*A. querquedula*), Pintail (*Anas acuta*), Pochard (*Aythya ferina*), Shoveler (*Anas clypeata*), Tufted Duck (*Aythya fuligula*), Red-crested Pochard (*Netta rufina*) are spread. At high and middle level of watering a mass nesting of Coots (*Fulica atra*) is observed. Among *Grebes* Great-crested and Black-necked Grebes (*Podiceps cristatus*, *P. nigricolis*) are typical. In reeds single pairs of Grey Heron and Great Egret (*Ardea cinerea*, *Egretta alba*), Bittern (*Botaurus stellaris*) and Little Bittern (*Ixobrychus minutus*) make their nests.

Colonial species are represented here in ecologically favourable years . 27-39 pairs of Dalmatian Pelicans (*Pelecanus crispus*) and 18-20 pairs of Great Cormorants (*Phalacrocorax carbo*) nested on the island in the southern part of Kulykol lake in 2000-2003. There were nesting colonies of Great Black-headed Gulls (220-250 pairs), Yellow-legged Gulls (up to 100 pairs), Common and Black-headed Gulls (*Larus ichthyaetus*, *L. cahinnans*, *L. canus*, *L. ridibundus*), Gull-billed, White-winged (*Gelochelidon nilotica*, *Chlidonias leucoptera*), Common and Black (*Sterna hirundo*, *Chlidonias niger*) Terns. Mixed colony of Gull-billed and Common Terns made up 300-400 pairs in 2000.

Nesting fauna of waders includes the following species: Lapwing (*Vanellus vanellus*), Black-winged Pratincole (*Glareola nordmanni*), Common Sandpiper (*Actitis hypoleucos*), Redshank (*Tringa totanus*), Black-winged stilt (*Himantopus himantopus*), Pied Avocet (*Recurvirostra avocetta*), Little Ringed Plover (*Charadrius dubius*), Black-tailed Godwit (*Limosa limosa*).

Kulykol lake is a place of mass moulting of Geese and Ducks in years of high and middle watering. At the beginning of June, 2000 the total number of forming gatherings was evaluated as 20-22 thousand birds. Dominating species among them were Greylag Goose (*Anser anser*) - 21.8 %, Mallard (*Anas platyrhynchos*) drakes - 41.7 %, Garganey (*A. querquedula*) - 14.3 % and Shovelers (*A. clypeata*) - 12.3 %. Wigeons (*Anas penelope*) - 8.7 %, Shelducks (*Tadorna tadorna*) - 7.7 % and Gadwalls (*Anas strepera*) - 6.6 %, as well as Sandpipers such as: Black-tailed Godwits (*Limosa limosa*), Pied Avocets (*Recurvirostra avocetta*), Little Stints (*Calidris minuta*) and Dunlins (*Calidris alpina*), were also numerous.

Kulykol-Taldykol lake system lies on the way of large migration of waterfowl. Autumn migration is especially long. Among migratory birds the following species predominate: Mallard (*Anas platyrhynchos*), Pintail (*A. acuta*), Garganey (*A. querquedula*), Tufted Duck (*Aythya fuligula*), Pochard (*A. ferina*) and Coot (*Fulica atra*). In some years Roody Shelducks (*Tadorna ferruginea*) are numerous – up to 10-12 thousand, as well as Gulls: Black-headed (*Larus ridibundus*), Little (*Larus minutus*) and Yellow-legged Gulls (*Larus cachinans*). Birds migrating in large groups are Geese. In 1996-1999 from 86 up to 160 thousand specimen were once registered, 57.0-65.9 % of them being White-fronted Geese (*Anser albifrons*), 8.4-10.1 % - Greylag Geese (*A. anser*), 2.2-7.0 % - Lesser White-fronted Geese (*Anser erythropus*) and 23.5-25.9 % - Red-breasted Geese (*Branta ruficollis*) (P.Tolvanen & P.Pynnonen. 1998, P.Tolvanen, K.Litvin & P.Lampila. 1999, P.Tolvanen, T.Eskelin,

T.Aarvak, G.Eichhorn, I.Oien, & E.Gurtovaya. 2000). Total scale of waterfowl migration in autumn is up to 450 000 birds. Waders also migrate in large groups (Ruff *Phylomachus pugnax*, Little Stint *Calidris minuta*, Dunlin *C. alpina*, Red-necked Phalarope *Phalaropus lobatus*, etc.) as well as Gulls and Terns. Common Cranes (*Grus grus*) are typical as well, while Great-crested (*Podiceps cristatus*) and Black-necked (*P. nigricollis*) Grebes are only typical in some years. In 2000-2005 Kulykol remained one of the most important reservoirs for landing of migratory birds in spite of worsening of its hydrologic regime.

During migration birds of prey are also observed on lakes: White-tailed Eagle (*Haliaeetus albicila*), Golden Eagle (*Aquila chrysaetos*), Imperial Eagle (*A. heliaca*), Greater Spotted Eagle (*A. clanga*) and Steppe Eagle (*Aquila nipalensis*), Hen, Montagu's, Pallid and Marsh Harriers (*Circus cyaneus*, *C. pygargus*, *C. macrourus* & *C. aeruginosus*), Kestrel (*Falco tinnunculus*), Hobby (*Falco subbuteo*); Merlin (*Falco columbarius*) and Black Kite (*Milvus migrans*) are also registered.

Among fauna of the steppe areas surrounding the lakes the following nesting birds are of the interest: Demoiselle Crane (*Anthropoides virgo*), Little Bustard (*Tetrax tetrax*), Black and White-winged Larks (*Melanocorypha yrltoniensis*, *M. leucoptera*).

Among fish two species of Crucian Carp (*Carassius carassius*, *C. auratus*) and Lake Minnow (*Phoxinus phoxinus*) lived in Kulykol lake in 1993-2000. Roach (*Rutilus rutilus*) and Perch (*Perca fluviatilis*) were recorded in 1994-1995. There have been attempts made to introduce Bream (*Abramis brama*), Common Carp (*Cyprinus carpio*) and *Coregonus albula*. No special ichthyologic investigations have been ever done here.

The following species are typical for the steppe zone of Northern Kazakhstan in the fauna of Amphibia and Reptiles: Moor Frog (*Rana arvalis*), Green Toad (*Bufo viridis*), Sand Lizard (*Lacerta agilis*) and Orsini's viper (*Vipera ursini*).

No less than 30 mammal species live on the territory of the wetland. The most numerous are various rodent species. In the offshore zone of the lakes there is Wood Mouse (*Apodemus sylvaticus*), Narrow-skulled Vole (*Microtus gregalis*), Rot Vole (*Microtus oeconomus*), Common Hamster (*Cricetus cricetus*), Harvest Mouse (*Micromys minutus*). Typical species in years of high watering are: European Water Vole (*Arvicola terrestris*) and Muskrat (*Ondatra zibetica*). Steppe biotopes are famous for: Common Vole (*Microtus arvalis*), Steppe Lemming (*Lagurus lagurus*), Northern Mole Vole (*Ellobius talpinus*), Southern Birch Mouse (*Sicista subtilis*), Eversmann's Hamster (*Allocricetulus eversmanni*), Russet Souslik (*Spermophilus major*). There are settlements of Marmots (*Marmota bobac*) on the eastern and southern slopes of the lake hollow. In fescue-wormwood and sagebrush steppes there is Great Jerboa (*Allactaga major*), Little Souslik (*Spermophilus pygmeus*) and Long-eared Hedgehog (*Erinaceus auritus*). European Hare (*Lepus europaeus*) - can be met everywhere, while Arctic Hare (*Lepus timidus*) - lives in offshore zone of the lakes. Wild boar (*Sus scrofa*) - was also found at lakes in the past. The following predators are widely spread: Badger (*Meles meles*), Stoat (*Mustela erminea*), Least Weasel (*Mustela nivalis*), Steppe Polecat (*Mustela eversmanni*), Corsac Fox (*Vulpes corsac*), Red Fox (*Vulpes vulpes*), Wolf - (*Canis lupus*).

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### 23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

Currently it is insignificant. At the period of migration the surrounding fields are very popular for hunting for geese. Not only hunters from Kazakhstan but also from neighbouring regions of Russia come here. In years of high water filling fishing season is opened (fishing of the food fish is allowed).

Water couch-grass meadows serve as good areas for hay making.

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box  and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

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**24. Land tenure/ownership:**

a) within the Ramsar site:

State ownership. Within the wetland bounds about 70 % of the area are referred to the state land reserve and 30 % of the area are assigned to Taldykol village for local citizens to tend the cattle.

b) in the surrounding area:

State-owned. Lands around the lake hollow are given to farms and Limited Liability Companies for a long-term use (rent).

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**25. Current land (including water) use:**

a) within the Ramsar site:

Being hunting areas Kulykol and Taldykol lakes with adjacent territory are assigned to Regional Society of Hunters and Fishermen. For fishing purposes Kulykol lake also belongs to the Society of Hunters and Fishermen, while Taldykol lake belongs to Limited Liability Company "Karabatyr". Nevertheless, fishing has been prohibited on Kulykol lake since 2000, after significant abatement of water level took place. Fishing on Taldykol lake is done in small quantities.

The area adjacent to the lakes is used to some extent by citizens of Taldykol village to tend their cattle.

b) in the surroundings/catchment:

The wetland is located in the region of intensive agricultural production, the main direction of which is growing commercial grain. Plough lands surround the lake hollow from all the sides starting from 2.0 km up to 5 km. Until 1990 of the past century a great number of the cattle from collective farms has been pastured in the lake hollow, and some area has been used to make hay. On the western shore of Kulykol lake there were farms. Currently these farms are abandoned and partially taken to pieces, while pasture areas and hayfields are still utilized, though to a lesser extent due to rapid reduction of cattle population.

The water from Taldykol lake is used by local population in fairly small quantities for watering cattle and technical purposes.

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**26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:**

a) within the Ramsar site:

In the past the basic negative factors were cattle trampling down and cutting down of the offshore vegetation, pollution by pesticides and manure, disturbance of fishermen doing fishing, and poaching. Trampling down of the offshore vegetation resulted in reduction of the area for nesting and destruction of eggs.

The current threat is fires, which often spread out from the steppe on to reed tracts in autumn. Annual burning out of vegetation of steppe areas changes its character and directly affects the animal population. Poaching pressure is insignificant.

b) in the surrounding area:

Significant influence on the hydrologic lake regime was done by ploughing of catchment areas and also climatic changes. Ploughing reduces the surface drainage at the period of snow melting, especially in years with little moisture supply in the soil. Plough lands beyond the borders of the very lake hollow make up about 80-85% of the territory.

Influence of climatic changes is disputable and requires special study.

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**27. Conservation measures taken:**

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Kulykol and Taldykol lakes with the adjacent territory are the part of the hunting area belonging to Society of Hunters. Never-the-less, the decree of regional executive bodies set up a rest zone within 3 km offshore zone on Kulykol lake where hunting is forbidden.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

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c) Does an officially approved management plan exist; and is it being implemented?:

None

d) Describe any other current management practices:

Rather effective preservation is done by regular inspectors of the Regional Society of Hunters and Fishermen. In summer preservation is executed by method of regular patrol. In hunting season and until the end of autumn migration of waterfowl a carriage is put at lakes and inspectors are always around. For the period of migration fishing is forbidden on lakes.

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**28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

In 2002 Kostanai territorial forestry and hunting agency made suggestions (№251 от 21.08.02) into Forestry and Hunting Committee to organize nature monuments on Kulykol and Taldykol lakes.

In 2006 within the regional project GEF/UNEP/WWF «Econet – Central Asia» national expert group prepared and passed a scheme of ecologic networks of Kazakhstan to the Forestry and Hunting Committee. The scheme suggests organizing a national zakaznik on Kulykol-Taldykol lake system.

Since 2005 the wetland territory has been one of the 4 project sites of UNEP/GEF project «Development of flyways and wetlands for conservation of Siberian Crane and other waterfowl in Asia», with the framework of which suggestions on preservation of lakes and corresponding documents will be prepared for the state management bodies.

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### **29. Current scientific research and facilities:**

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

In October 1996 ornithologists of Finish-Kazakhstan team expedition conducted the first autumn monitoring of migrating geese on lakes of Kulykol-Taldykol lake system within the program on researches of flyways of Lesser White-fronted Goose. Since that time such monitoring events have taken place every year. Spring records were implemented by the same group of ornitologists in 1997 and 1998.

Determination of the composition and number of waterfowl at the period of nesting and molting, description of vegetation and general status of lakes are executed by workers of Naurzum reserve and Institute of Botany numbered with the working group of the WWF project on development of network of key wetlands of Kostanai region in 2000.

Since 2005 the monitoring of migration of waterfowl has been being conducted with the framework of UNEP/GEF project «Development of flyways and wetlands for conservation of Siberian Crane and other waterfowl in Asia».

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### **30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

A cycle of training workshops in proper identification of especially protected wetland bird species of Kostanay region including Kulykol - Taldykol project site was organized for inspectors and the members of the society of huntsman and fishermen within the framework of GEF/UNEP/ICF "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" project implementation **from 10 to 21 July 2008** in Kostanay region.

**The goal of the training:** improvement of the skill of rangers, huntsmen and inspectors at the project sites in the field of identification especially protected, globally threatened wetland birds species of the project sites, informing about the activity under the project, global significance of the project sites, preventive measures and ways of identification of animals taken by avian flu. Informational materials on 46 especially protected species were prepared.

The program on Environmental Education (2005-2009) for teachers, students, 3-4, 5-8 and 9-11 forms of general schools, lectures of higher educational institutions and inspectors of protected territories has been developed within the framework of Kazakhstan Coordination Unit of **GEF/UNEP/ICF** "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" International Project.

Since 2005 schoolchildren of Taldykol village have been involved in the annual celebration of "Crane Day" organized under the aegis of the UNEP/GEF project «Development of flyways and wetlands for conservation of Siberian Crane and other waterbirds in Asia»

In 1999-2000 broadcasts about wetlands of Kostanai region were organized on the local television. A leaflet "Key wetlands of Northern Kazakhstan" (2000) was made. There is a scientific society of school-children in a secondary school of Taldykol village, which carries out the work devoted to nature study.

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### **31. Current recreation and tourism:**

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

There is none at the moment. Surrounding fields are the place of amateur hunting for many

Kazakhstan people and Russians. But there is a potential for ecotourism development in the region. The lake is open in spring and autumn.

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### 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.  
Kazakhstan, Kostanai oblast (region), Kamystinsky rayon (district)

Forestry and Hunting Committee of the Ministry of Agriculture of the Republic of Kazakhstan:  
010000, Astana city, 35/2 street, Ministry House,  
entrance №5, 6 floor, office 608  
Tel.: +7(7172)742834  
Secretary: +7(7172) 743326

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### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Regional Society of Hunters and Fishermen: Kostanai, Gogolya str. 181, tel/fax (3142) 535617.  
E-mail: [kostanai\\_ohota@mail.ru](mailto:kostanai_ohota@mail.ru); Chairman – Kovalenko A.Y.

Controlling body: Kostanai Territorial Forestry and Hunting Agency. Kostanai, Gagarina str. 85.  
E-mail: [leskst@mail.ru](mailto:leskst@mail.ru); The head – M. Begimbetov

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Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**

Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: [ramsar@ramsar.org](mailto:ramsar@ramsar.org)